Alaska

Comprehensive System of Student Assessment (CSSA)

Educator Guide To
Test Interpretation for the Alternate Assessment
For Science
Spring 2013

Introduction

The Educator Guide explains the Alternate Assessment so educators can understand the outcomes and various reports. The following information is included in this guide:

- The first four pages of the Educator Guide provide an explanation of the purpose of testing, the components of the Alternate Assessment, and a description of the Student Report
- The Conditions of Administration of the Alternate Assessment, including standard administration and eligibility for using the Expanded Levels of Support (ELOS) test items
- Example Report: Expanded Levels of Support (ELOS)
- Example Report: Unofficial Student Report
- Description of the Reading, Writing, and Mathematics tasks
- Alternate Assessment Regulation, Cut Score Ranges, and Proficiency Level Descriptors
- Glossary of Terms

The Purpose of Testing

The purposes of statewide student assessment specifically are to: 1) help determine which children are meeting statewide performance standards; 2) produce statewide information to facilitate sound decision making by policy makers, parents, educators, and the public; and 3) provide a focus for instructional improvement [4 AAC 06.700]. The purpose of the Alternate Assessment (AA) is to ensure that students with significant cognitive disabilities have access to, participate in, and make progress in the general education curricula, as well as show what they know and can learn [4 AAC 06.775].

What the Alternate Assessment in Science Measures

The Alternate Assessment measures what students know and can do at their grade level in reading, writing, and mathematics (and science) compared to the Alaska Extended Grade Level Expectations (ExGLEs) for students with significant cognitive disabilities. The Alaska Alternate Assessment is based on Extended Grade Level Expectations with the performance measured against alternate achievement standards which differ in complexity from grade level achievement standards. The Alternate Assessments in science are tested in grades 4, 8, and 10.

Components of the Alternate Assessment in Science

The Alternate Assessment tests reading, writing, and mathematics (and science) as required by state and federal law. Statewide assessment of functional skills is not included in this academic assessment as the statewide assessment must measure the student's academic knowledge and skills in reading, writing, mathematics, and science. The tasks included in this assessment are performance, curriculum-based measures and are aligned to

the Extended Grade Level Expectations. The assessment permits the use of accommodations, assistive technology, and adaptations of the material in order to provide the best access of the content for each student.

Science
The alternate assessment in science is comprised of three grade level assessments (grades 4, 8, and 10) designed to measure essential skills in science. The tasks are designed to measure the degree to which students with significant cognitive disabilities are learning to comprehend and apply scientific knowledge. The tasks increase in complexity with each grade and include: concepts of physical science, concepts of life science, concepts of earth science, the history and nature of science, and science and technology. Individual grade assessments are comprised of the following: grade 4 contains 4 tasks addressing 5 content standards; grade 8 contains 4 tasks addressing 4 content standards; and grade 10 contains 4 tasks addressing 4 content standards.

Reading the Individual Student Report
The Individual Student Report (ISR) provides a graphic and text display of student performance. After student information is verified for accuracy, scores are calculated, and proficiency levels assigned. An **official student report** then is uploaded to the DRA Reporting Website and mailed by the Department of Education and Early Development to the districts.

Science Score Possible and Score Earned columns display raw scores. Only valid scores are used for Adequate Yearly Progress (AYP). Scores for the Expanded Levels of Support (ELOS) items are designated as Far Below Proficient, and ELOS scores are not graphically displayed. If the student takes both Standard and ELOS items, only the standard data are displayed.

A	This section identifies the year for the report, and all student demographic information.
B	**Your Student's Overall Performance** indicates the student's score, what score is needed for proficiency according to the approved cut scores, and the student's proficiency levels for the subject area of science.
C	**Interpretation of Chart** explains how to read components of the chart such as proficiency levels, student skills performance, and expanded levels of support.
D	This section describes the proficiency level reported in B for Science separated into strands, giving the total possible score and the score earned.
E	This is a graphical representation of the score needed to obtain levels of proficiency for reading (FB – Far Below, BP – Below Proficiency, P – Proficient, and A – Advanced Proficient) and indicates where the student's score falls on the proficiency graph.
F	Reverse side of page shows the Proficiency Level Descriptors and cut scores by proficiency level for this grade.

A

ALASKA COMPREHENSIVE SYSTEM OF STUDENT ASSESSMENT (CSSA)
ALTERNATE ASSESSMENT
STUDENT REPORT

NAME : **Last Name, First Name Middle Name**
BIRTHDATE: **99/99/9999**

DISTRICT : **Alaska District**
SCHOOL : **Alaska Elementary School**

GRADE : **10**
STATE ID NUMBER : **9999999999**
DISTRICT ID NUMBER : **999999999**

B

Your Student's Overall Performance

	Student's Score	Score Needed for Proficiency	Student's Proficiency Level
Science	**28**	**26 or above**	Proficient

*NT-Student Not Tested in this content area.

C

Interpretation of Chart

This report provides a record of the student's test results on the Alternate Assessment in the content area of Science.

Proficiency Levels
The graphic display of scores shows the possible student scores ranging from 0 to 48. Proficiency levels are noted below the score ranges: FB-Far Below Proficient, BP-Below Proficient, P-Proficient, A-Advanced.

Student Skills Performance
The content area of Science is composed of different skills organized into strands. Strands are clusters of learning standards in the content area organized around a central idea or concept. The strand sub-scores are represented numerically in the Score Earned column. Score Possible and Score Earned are raw scores in Science. The graphic displays of student scores are represented by the diamond shapes. The line through the diamond represents the student's score range if the student took the test multiple times; given that all testing results in some variation, sometimes, the student might score a little lower and other times they might score a little higher.

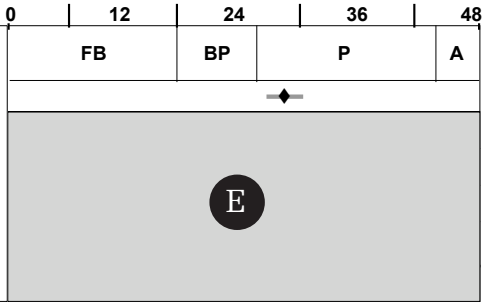
Expanded Levels of Support
Expanded Levels of Support (ELOS) are test items designed to make the alternate assessment more accessible to students who score zero on a minimum number of required test items, and therefore, translate to far below proficient in performance. The ELOS scores are not scaled to the scores of the standard administration of the alternate assessment.

Your Student's Performance by Standard
PERFORMANCE LEVELS AND PROBABLE SCORE RANGES

D

Subject/Strand	Score Possible	Score Earned
Science	48	**28**
Physical Science	12	**12**
Life Science	12	**8**
Earth Science	12	**0**
History and Nature of Science; Science and Technology	12	**8**
Expanded Levels of Support Tasks	60	

SCIENCE



E

Explanation of the Conditions of Administration for the Alternate Assessment
All students eligible for the Alternate Assessment must first take the standard administration of the alternate assessment before becoming eligible for the Expanded Levels of Support (ELOS) test items. ELOS scores are always far below proficient and not scaled to the cut scores. The following rules govern the administration of standard or ELOS items in the Spring of 2012 assessment cycle.

STD means **Standard administration with or without accommodations**. A standard administration refers to a student taking the test in a manner consistent with the test directions and appropriate accommodations. The tasks can be administered with accommodations that do not alter the content being assessed. A score obtained under standard administration conditions with or without accommodations is considered comparable to other scores obtained under the standard administration conditions.

Three Task-Three Item Rule. Every student taking an Alaska reading, writing, mathematics, or science Alternate Assessment must take a minimum three tasks under the Standard administration with or without accommodations. For each of the minimum three tasks, the student must be presented with at least three items in the task before moving on to the next task. When the student gives no response, refuses, or earns a zero score on three consecutive items in three consecutive tasks, the assessor may stop the assessment for that content area. Not Administered— Inappropriate (NA-I) will not be accepted as an administration condition for the three minimum tasks.

Not Administered-Inappropriate (NA-I). NA-I is to be used only for specific disabilities as applied to the Reading Assessment: Task 1.34A for students who are blind or visually impaired and Task 1.34C and 1.910A for students who are deaf or hard of hearing.

Not Tested (NT). Not tested indicates the student did not test in that content area. The reasons a student may not be assessed in a content area include: Absent, IEP change, Late Entry, Long Term Illness, Suspension, and Other. Other requires an explanation. If a content area is not assessed, a reason not tested is required; otherwise student scores cannot be submitted in the online data entry system.

Expanded Level of Support (ELOS) Items. ELOS test items were developed to provide access to the academic tests for students with the most profound disabilities so that they have an opportunity to demonstrate what they know and can do. The ELOS items are linked to the content strands, but the items are sub-skills of the Extended Grade Level Expectations, and therefore, do not adequately assess the content areas resulting in Far Below Proficient scores.

Three Task-Fifteen Item Rule (ELOS). Each ELOS task has five items. Students are scored using the *Levels of Independence Scoring Rubric* shown below. Each student is presented with three tasks composed of five items, for a total of 15 items.

Levels of Independence / Student Score

Support Level/Score	Description
1	Assessor uses full physical contact to elicit student response
2	Assessor uses partial physical contact to elicit student response
3	Assessor uses visual, verbal, and/or gestural prompts to elicit student response
4	Student independently responds; no contact and no prompting required

Unofficial Student Reports

An **unofficial student report** is generated when Qualified Assessors enter student test scores after completing the administration of the Alternate Assessment during the test window in February - April 2012. It is immediately available and is designed to provide instructional feedback. A separate student report is generated for reading, writing, and mathematics. The unofficial, online reports have a different appearance than the official reports. Scores are represented in percentage correct and no proficiency levels are assigned.

The following is an example of an Unofficial Student Report. A summary page reflects percentages correct of the tasks the student took. These scores do not reflect the scores required to gain proficiency. A Summary of Scores by Subject Area is given, indicating the student's percent correct for each subject area. Although Grade 8 is tested in all subject areas, reading, writing, math and science this sample report only demonstrates all required tasks for the Grade 8 Science.

Science Alternate Assessment Task Descriptions

This section contains a description of the Science tasks found in the alternate assessment. The tasks are grouped by content standard and grade. For example Task 1.4 means this is the first task for the content standard (1) for grade 4 (.4).

Task 1.4, 1.8, 1.10 – Concepts of Physical Science
Task 2.4, 2.8, 2.10 – Concepts of Life Science
Task 3.4, 3.8, 3.10 – Concepts of Earth Science
Task 4.4 – History of Nature of Science, Science and Technology, 4.8, 4.10 – Science and Technology

Proficiency Level Descriptors and Score Ranges

Science assessments were required by the federal government to be administered in spring 2008. The Alternate Assessment Standard Setting Committee met in May 2008 to determine the proficiency levels and cut scores for the alternate assessment in science. The State Board of Education has adopted the following cut scores for the Alternate Assessment.

Alternate Assessment Regulation for Science

4 AAC 06.775(b) is amended to read:

(c) To obtain a proficiency level of advanced, proficient, below proficient, or far below proficient in science the Alaska Alternate Assessment, a student must obtain a score as set out in the following table:

Proficiency Level	Grade 4	Grade 8	Grade 10
Science: Advanced	44 or above	44 or above	44 or above
Science: Proficient	24-43	29-43	26-43
Science: Below proficient	12-23	16-28	18-25
Science: Far Below Proficient	11 or below	15 or below	17 or below

Authority: AS 14.03.075 AS 14.07.060

ALASKA COMPREHENSIVE SYSTEM OF STUDENT ASSESSMENT (CSSA)
ALTERNATE ASSESSMENT
UNOFFICIAL STUDENT REPORT

This unofficial report details student performance by task. Scores are listed both as number correct / maximum possible and total percent correct. Tasks with no student score information are blank. For more information about these scores or testing procedures, please refer to the appropriate scoring protocol or training manual. This report is informational only and will be superseded by release of the official student report.

NAME : **Sample, Sally** DISTRICT : **DRA** GRADE : **8**
BIRTHDATE : **07/19/2001** SCHOOL : **DRA** STATE ID NUMBER : **2147483647**
DISTRICT ID NUMBER : **9999999999**

Summary Scores by Subject Area		
Subject Area	**Standard Administration**	**ELOS Items**
Reading	51%	NA*
Writing	56%	NA*
Mathematics	62%	NA*
Science	75%	NA*

Unofficial Report *Not Administered

Alaska's Alternate Science
Proficiency Level Descriptors – Grades 4, 8 and 10

The following descriptors for science describe the skills necessary at each of the achievement levels: Advanced, Proficient, Below Proficient, and Far Below Proficient. Science is assessed only in grades 4, 8, and 10.

Proficiency Levels	**Grade 4**	**Grade 8**	**Grades 10**
Advanced	The student displays a highly developed conceptual understanding by identifying: objects that need energy to work, states of matter, effects of forces on objects, similarities and differences among organisms, water and land on a map, changes in living things, needs of all organisms, how habitats meet the needs of plants and animals, types of weather relating to seasons, earth, sun and moon; matching: tools to function, information about what is seen, heard, felt; answering questions about what can be observed; observing features in the local environment; grouping objects by single characteristics; using a symbol to represent information/data; collecting local or traditional stories that explain natural events.	The student displays a highly developed conceptual understanding by identifying: the basic characteristics of common objects, familiar electronic devices and the type of energy they produce, an object as a liquid, solid or gas, the purpose of different animal adaptations, that seasons repeat each year in a pattern, characteristics of the solar system, steps in the problem solving process; recording, observing, and describing the movement of an object by its position and speed; contrasting inherited traits with those that are not; describing how habitats provide for organisms' basic needs; sequencing stages within life cycles; observing a model of the rock cycle; recognizing how the Earth's surface can change as a result of geological activity; distinguishing between stars, planets, and moons; sequencing the use of tools to solve a multi-level task; describing technology in everyday life; connecting a local or traditional story that explains a natural event; making a record of observations over time; and asking questions about the natural world.	The student displays a highly developed conceptual understanding by identifying: components of the food chain, the water cycle is connected to the rock cycle, conditions and the effect of weather, stars, planets, moon, comets and meteors; observing and describing student's own world; supporting the student's own ideas with observations and facts; classifying: objects by their physical properties, familiar electronic devices and the type of energy they produce; recognizing that temperature changes affect phases of substances; predicting the effects of forces on the motion of objects; recognizing that species survive by adapting to the changes in their environment; observing and classifying seasonal adaptations; describing: how the Earth's surface can change as a result of geological activity, the effects of lacking technology in everyday life; and relating a local or traditional story to a scientific explanation.
Score Ranges	*Advanced: 44 or above*	*Advanced: 44 or above*	*Advanced: 44 or above*

Proficiency Levels	Grade 4	Grade 8	Grades 10
Proficient	The student demonstrates a basic conceptual understanding by applying the processes of science during simple investigations, including demonstrating an understanding of cause-and-effect, (e.g., when more water is added to a full glass, the water will spill out) by identifying: that living things reproduce, objects according to like or different, states of matter, differences between living/nonliving things, a variety of Earth's features and features in the natural world and types of weather; matching plants and animals to their habitats; using: a variety of simple tools; identifying what materials found on earth are used for, symbols to represent information/data; demonstrating: transfer of energy (e.g., switch use), and ways objects can move.	The student demonstrates a basic conceptual understanding by applying the processes of science during simple investigations by identifying: the physical changes commonly found in the environment, that organisms differ from one species to another, features of geophysical events, the earth, sun, and moon, seasonal characteristics, uses of technology; responding appropriately to questions based on observations; indicating differences in environmental conditions; using simple descriptors to relate information about an object; identifying familiar electronic devices; observing and describing directional movement of objects; sequencing stages of the life cycle; connecting living organisms to their environment;; selecting: appropriate solution to a problem, appropriate tool to solve a problem; telling a local or traditional story that explains an event; and arranging data to communicate a sequence of events.	The student demonstrates a basic conceptual understanding by identifying: the basic characteristics of common objects, describing the way in which objects get energy, an object as a liquid, solid or gas, purpose of different animal adaptations, herbivore, carnivore, and omnivore, characteristics of the solar system, steps in the problem solving process; recording, describing and classifying observations; observing and describing the movement of an object; contrasting inherited traits with those that are not; sequencing stages within life cycles; recognizing how the Earth's surface can change as a result of geological activity; distinguishing between stars, planets, and moons; connecting a local or traditional story that explains a natural event; making a record of observations over time; and answering questions about the natural world.
Score Ranges	*Proficient: 24-43*	*Proficient: 29-43*	*Proficient: 26-43*

Proficiency Levels	Grade 4	Grade 8	Grades 10
Below Proficient	The student shows a fundamental understanding by identifying: the difference between plant and animal, living things, nonliving things, natural world and man made environment; demonstrating: ability to investigate by looking at, touch, hearing, or smelling things in the environment; observing: states of matter, the operation of switches by others, objects in movement, a simple problem being solved; using: a variety of tools; and listening to a local or traditional story that explains a natural event.	The student shows a fundamental understanding by identifying: and naming liquid and solid, objects need energy to work, effects of force on objects, similarities and differences among organisms, changes in living things as they age, that all organisms need food, types of weather, earth, sun and moon, between man made and natural objects, when an object is revolving around another, solutions to a problem; matching a simple tool to its function; describing: characteristics of rocks, information about what is seen, heard, felt, observing features in a local environment; grouping objects by a single characteristic; collecting local or traditional stories that explain a natural event; and using a symbol to recognize data.	The student shows a fundamental understanding by identifying: the physical changes commonly found in the environment, organisms differ from one species to another, plants need sunlight to grow, differences between stars and planets, seasonal characteristics, uses of technology; recording observations; responding appropriately to questions based on observations; indicating differences in environmental conditions; using simple descriptors to relate information about an object; describing the way in which objects get energy; observing and describing directional movement of objects; sequencing the stages of a life cycle; connecting living organisms to their environment; relating features on a map to actual features on Earth; selecting: appropriate solution to a problem, appropriate tool to solve a problem; telling a local or traditional story that explains a natural event; arranging data to communicate a sequence of events; and answering questions about the natural world.
Score Ranges	*Below: 12-23*	*Below: 16-28*	*Below: 18-25*
Far Below Proficient	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.
Score Ranges	*Far Below: 11 or below*	*Far Below: 15 or below*	*Far Below: 17 or below*

Glossary of Terms

Alternate Assessments are designed for students with significant cognitive disabilities that prevent them from taking the regular Standards Based Assessment (SBA) with or without accommodations. Students must meet the eligibility criteria as specified in the *Participation Guidelines* or located on the Alternate Assessment website in expanded format at http://www.eed.state.ak.us/tls/assessment/AlternateOptional/05-06/ExpandedFormatPartCriteriaAug05.pdf

Access Skills (Early Entry Points) are the very basic, underlying social, motor, or communication skills needed by students to be able to accomplish the content learning standards and may be part of the student's Individualized Education Program's (IEP). Instead of teaching these skills in isolation, they may be embedded within the context of standards-based instructional activities. This allows the student to practice targeted IEP skills while providing access to the general education curriculum. Access skills are not part of the grade level expectations but when used during content-related activities, they meaningfully engage students in the content activities and expose students to new ideas while practicing necessary skills required in the student's IEP.

Age-Appropriate Instruction and Materials – Instruction of students should open up opportunities to access the content standards, not limit participation in the grade level instructional activities. Materials and activities should reflect the chronological age of the student and be consistent with the content, activities, materials, and expected outcomes for all students. Materials may be adapted to provide access for the student with an Individualized Education Program (IEP).

Content Standards are broad statements of what students should know and be able to do as a result of their public school experience.

Performance Standards are aligned to the Content Standards and are measurable statements of what students should know and be able to do in the age spans 5-7, 8-10, 11-14, and 15-18.Within these standards are **strands**, which are clusters of learning standards in the content area organized around a central idea or concept.

Grade Level Expectations (GLEs) are specific statements of the knowledge and/or skills that students are expected to demonstrate at each grade level. They serve as checkpoints that monitor progress towards the performance standards and ultimately, the content standards. The grade-level expectations do not replace the performance standards; rather, they serve to clarify the standards. They also serve to define and communicate eligible content, or the range of knowledge and skills from which instruction and the new assessments are designed.

Extended Grade Level Expectations (ExGLEs) are linked to the Performance Standards/Grade Level Expectations. They are measurable statements of what students with significant cognitive disabilities should know and be able to do at grade level. The extended grade level expectations are foundational skills and are less complex than the grade level expectations.

Early Entry Points describe the least complex skills and are prerequisites to the skills being assessed. They provide a range of options at which a student with a disability can access the learning standard at a less complex level. See above for definition of **Access Skills** and their relationship to standards.

Achievement Standards are descriptions of a test taker's competency, and **Alternate Achievement Standards** (AAS) are descriptions of competency for students who take the alternate assessment. There are four components of achievement standards.

1. **Labels** designating the different levels of student achievement. Alaska's proficiency levels are labeled: Advanced, Proficient, Below Proficient, and Far Below Proficient.
2. **Proficiency descriptors** are narrative statements describing student achievement at the different levels of competence useful in determining cut scores.
3. **Cut scores** separate the different achievement levels
4. **Exemplars** are samples of student work or student test results.